CORRESPONDENCE | HEPATOLOGY COMMUNICATIONS, VOL. 3, NO. 7, 2019

Prothrombin Complex Concentrates Only After Thromboelastography

TO THE EDITOR:

The article by Drebes et al. (1) raises several issues regarding the use of clotting factors in patients with liver disease. They demonstrate that the use of prothrombin complex concentrates (PCCs) was effective in improving coagulation tests, prothrombin time, and international normalized ratio (INR). However, although INR may be used as a prognostic tool in liver disease, it has been demonstrated that conventional tests do not accurately predict the risk of bleeding. (2) The fall in clotting levels seen in liver disease is accompanied by a parallel decrease in anticoagulant tests and a precarious rebalance of hemostasis. Similarly, the fibrinogen level does not reflect the functional activity of fibrinogen, as a functional dysfibrinogenemia develops in 50%-78% of patients with chronic liver disease. (3) This interaction can be better demonstrated through the use of thromboelastography. Do the authors not agree that this should be carried out before the administration of PCCs, to demonstrate the total dynamics of clot formation, strength, and stability?

Ellis Muggleton, BMedSci, MBChB **
Tülin Muggleton, M.D.*

Department of Anesthesiology and Intensive Care Medicine, Klinikum rechts der Isar Technical University of Munich Munich, Germany

REFERENCES

- Drebes A, de Vos M, Gill S, Fosbury E, Mallett S, Burroughs A, et al. Prothrombin complex concentrates for coagulopathy in liver disease: single-center, clinical experience in 105 patients. Hepatology Communications 2019;3:513-524.
- Segel JB, Dzik WH. Paucity of studies to support that abnormal coagulation test results predict bleeding in the setting of invasive procedures: an evidence based review. Transfusion 2005;45:1413-1425.
- 3) Tripod IA, Mnnucci PM. The coagulopathy of chronic liver disease. N Engl J Med 2011;365:147-156.

*The authors contributed equally to this work.

© 2019 The Authors. Hepatology Communications published by Wiley Periodicals, Inc., on behalf of the American Association for the Study of Liver Diseases. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

View this article online at wileyonlinelibrary.com.

DOI 10.1002/hep4.1359

Potential conflict of interest: Nothing to report.